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# SCIENCE

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FRIDAY, JUNE 3, 1898.

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## ON A FLICKER PHOTOMETER.

IN the September number of the *American Journal of Science* for 1893 I described a photometric method founded on flickers, which I had proved to be independent of color, and stated that there did not seem to be any reason why it should not be applied to ordinary photometric work. In January, 1896, Professor F. P. Whitman published, in the *Physical Review*, an account of a photometer with a revolving disc of cardboard, in which this flicker method was utilized with more or less success. Afterwards I constructed and experimented with five different forms of flicker photometers, and in November, 1896, read a paper on the subject before the National Academy of Sciences.

I propose here to give a short account of one of these forms, and to mention a few experiments that were made with it by myself and others.

The two sides of the white, upright, 90° prism, P, are illuminated with the lights to be compared, coming from the incandescent lamps L and L', and the flicker is brought about by the rapid motion of the cylindrical lens, or biprism of small angle, C. This is caused to oscillate horizontally by a train of toothed wheels, W, which can either be turned by hand, or better by a small electromotor, E, the speed of which is regulated by a friction break. When the apparatus is in action the two illuminated sides